

Appl. No. 10/078,042
Docket No. 8430L
Amdt. dated September 29, 2009
Reply to Office Action mailed on June 29, 2009
Customer No. 27752

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A system to improve the management of an individual's health, the individual suffering from an asthmatic condition, the system including:
 - a. a data measurement mechanism generating data relevant to a particular physical health the individual's asthmatic condition of the individual;
 - b. a data acquisition mechanism transferring the data from the data measurement mechanism to a storage medium, wherein the data acquisition mechanism and the data measurement mechanism are disposed on a single handheld device;
 - c. at least one data analysis mechanism generating information pertaining to the physical health of the individual wherein the data analysis mechanism performs at least one analysis based on historical or recent health data of the individual collected in accordance with a sampling strategy comprising collection of the data on a plurality of days, the analysis selected from the group consisting of: statistical control chart techniques, multi-variate analysis, attribute data analysis, and reliability engineering analysis; and
 - d. an information presentation mechanism displaying the information pertaining to the physical health of the individual.
2. (Previously presented) The system to improve the management of an individual's health according to claim 1 wherein the at least one data analysis mechanism further comprises data analysis software.
3. (Original) The system to improve the management of an individual's health according to claim 1 wherein the at least one data analysis mechanism further

comprises automatic or triggered recalculation of control limits based on top demonstrated historical performance.

4. (Original) The system to improve the management of an individual's health according to claim 1 wherein the reliability engineering analysis includes time between failures and failure duration.
5. (Original) The system to improve the management of an individual's health according to claim 1 wherein the at least one data measurement mechanism includes a sensor.
6. (Currently amended) A system to improve the management of an individual's health, the individual suffering from an asthmatic condition, the system including
 - a) a handheld data measurement mechanism generating data relevant to a particular health the individual's asthmatic condition;
 - b) at least one data acquisition mechanism transferring the data from the data measurement mechanism to a storage medium wherein the at least one data acquisition mechanism is selected from the group consisting of: a tablet PC, voice recognition, and telemetry based systems;
 - c) at least one data analysis mechanism generating information pertaining to the health of the individual, wherein the data analysis mechanism performs at least one statistical control chart analysis based on historical or recent health data of the individual collected in accordance with a sampling strategy comprising collection of the data on a plurality of days; and
 - d) an information presentation mechanism displaying the information pertaining to the health of the individual, the displayed information comprising a statistical control chart based on the historical or recent health data of the individual.

7. (Previously presented) The system to improve the management of an individual's health according to claim 6 wherein the at least one data acquisition mechanism includes a handheld device selected from the group consisting of: a PDA and a handheld PC.
8. (Currently amended) A system to improve the management of an individual's health, the individual suffering from an asthmatic condition, the system including:
 - a) a data measurement mechanism generating data relevant to a particular health condition of the individual;
 - b) at least one data acquisition mechanism transferring the data from the data measurement mechanism to a storage medium, the data acquisition mechanism being adapted to perform a preliminary analysis on the data and provide an output when the data comprises a value that is outside of a target;
 - c) at least one data analysis mechanism generating information pertaining to the health of the individual, wherein the data analysis mechanism performs at least one statistical control chart analysis based on historical or recent health data of the individual collected in accordance with a sampling strategy comprising collection of the data on a plurality of days, the information including at least one level of intervention when an out-of-control condition requiring intervention has been measured; and
 - d) an information presentation mechanism displaying to the individual the information pertaining to the health of the individual, wherein the at least one information presentation mechanism is selected from the group consisting of: a graphical summary screen, an icon based summary screen, a help guide, and anthropomorphic help guide, and synthesized speech.
9. (Currently amended) A method for improving the health of an individual, the individual suffering from an asthmatic condition, the method including the steps of:

- a. selecting at least one health parameter appropriate for the individual based on the individual's medieal asthmatic condition and medical history, current or recent health event(s) of interest, age and/or demographics, or any other health parameter of interest to the individual, caregiver, or medical professional;
- b. creating a sampling strategy comprising collection of data on a plurality of days, for measuring the at least one health parameter of interest;
- c. measuring the at least one health parameter of interest and pertinent environmental or qualitative information according to the sampling strategy to produce the data;
- d. acquiring the data for storage and subsequent analysis;
- e. analyzing the data via at least one electronic data analysis mechanism to define at least one of an out-of-control situation requiring intervention and potential causes or remedies of an out-of-control situation wherein the data analysis mechanism performs at least one analysis based on the historical or recent health data of the individual, selected from the group consisting of: statistical control chart techniques, multi-variate analysis, attribute data analysis, and reliability engineering analysis; and
- f. presenting the information to the individual, caregiver, or medical professional.

10. (Previously presented) The method for improving the health of an individual according to claim 9 wherein the information presented is selected from the group consisting of: statistical analysis, out-of-control points, control rules violations, specification violations, medical limit violations, medical condition related information, advertising for products related to the individual's medical condition or health event, help guides, summary screens.

14. (Previously presented) The method for improving the health of an individual according to claim 9, wherein the statistical control chart technique comprises a statistically generated upper control limit of 3 times the standard deviation of the mean of the particular health parameter of interest.
15. (Previously presented) The method for improving the health of an individual according to claim 9 wherein the statistical control chart technique comprises a lower control limit of minus 3 times the standard deviation of the mean of the particular health parameter of interest.
16. (Previously presented) The method for improving the health of an individual according to claim 14, wherein the out-of-control situation is indicated by one or more data points outside of the upper control limit.
17. (Previously presented) The method for improving the health of an individual according to claim 15, wherein the out-of-control situation is indicated by one or more data points outside of the lower control limit.
18. (Previously presented) The method for improving the health of an individual according to claim 9, wherein the out-of-control situation is indicated by the occurrence of 3 consecutive data points within one and a half standard deviations of the mean of the particular health parameter of interest.
19. (Previously presented) The method for improving the health of an individual according to claim 9, wherein the out-of-control situation is indicated by the occurrence of seven consecutive data points on the same side of the mean of the particular health parameter of interest.
20. (Previously presented) The method for improving the health of an individual according to claim 9, wherein the out-of-control situation is indicated by the

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occurrence of 10 out of 11 consecutive data points on the same side of the mean of the particular health parameter of interest.

21. (Previously presented) The system of claim 1 wherein the analysis comprises statistical control chart techniques.
22. (Previously presented) The system of claim 1 wherein the analysis comprises multi-variate analysis of variable data and attribute data.
23. (Previously presented) The system of claim 6 wherein the analysis further comprises multi-variate analysis of variable data and attribute data.
24. (Previously presented) The system of claim 8 wherein the analysis further comprises multi-variate analysis of variable data and attribute data.
25. (Previously presented) The method of claim 9 wherein the analysis comprises statistical control chart techniques.
26. (Previously presented) The method of claim 9 wherein the analysis comprises multi-variate analysis of variable data and attribute data.
27. (Previously presented) The system of claim 1 wherein the analysis uses a target.
28. (Previously presented) The system of claim 6 wherein the analysis uses a target.
29. (Previously presented) The system of claim 8 wherein the analysis uses a target.
30. (Previously presented) The method of claim 9 wherein the analysis uses a target.